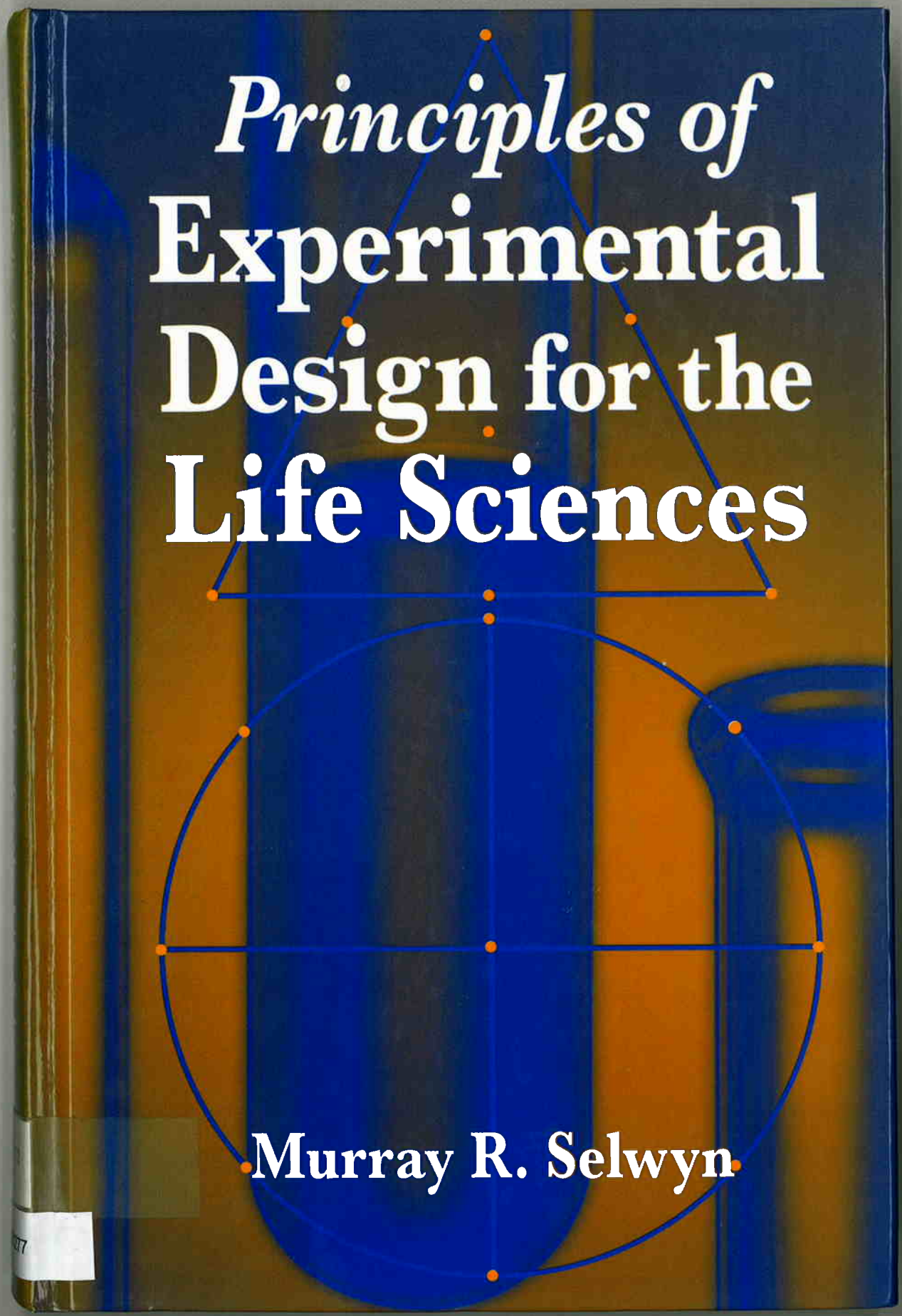
Principles of
Experimental
Design for the
Life Sciences
Murray R. Selwyn

TABLE OF CONTENTS

Chapter 1 Introduction and Overview 1

Chapter 2 Planning Biomedical Studies 9
2.1 Study Objectives 9
2.2 The Planning Process 11
2.3 Writing the Protocol 12
2.4 Correspondence Between Objectives, Design, and Analysis 13

Chapter 3 Principles of Statistical Design 17
3.1 Bias and Variability 17
3.2 Identifying and Quantifying Sources of Bias and Variability 18
3.3 Methods to Control Bias and Variability 22
3.4 Defining the Experimental Unit 26
3.5 Randomization 27
3.6 Uniformity Trials 30
3.7 Blocking 32
3.8 Binding 34

Chapter 4 Sample Size Estimation 37
4.1 Statistical Context 37
4.2 Sample Sizes for Point Estimation 39
4.3 Sample Sizes for Interval Estimation 40
4.4 Sample Sizes for Hypothesis Testing 41
4.5 Pilot Studies 45
4.6 Subsampling Issues 48
4.7 Sensitivity Analyses 49

Chapter 5 Common Designs in Biological Experimentation 53
5.1 The Completely Randomized Design 54

5.1.1 The One-Way Layout 55
5.1.2 Factorial Design 55
5.1.3 Advantages and Disadvantages of the Completely Randomized Design 58
5.2 Stratified Design/Randomized Block Design 58
5.3 Crossover Study 62
5.4 Split Plot Design 65
5.4.1 Origin 65
5.4.2 Repeated Measures Design 66
5.4.3 Summary 67
5.5 Types of Control 67
5.5.1 Negative Control 68
5.5.1.1 Subject as His/Her Own Control 68
5.5.1.2 Untreated Control 69
5.5.1.3 Placebo Control 69
5.5.2 Active Control 70
5.6 Dose Selection in Dose-Response Studies 72
5.7 Multicenter Studies 78
5.8 Summary 80

Chapter 6 Sequential Clinical Trials 83
6.1 History 83
6.2 Rationale 85
6.3 Sequential Designs 86
6.4 Group Sequential Designs 93
6.5 Interim Analyses 99
6.6 Data Monitoring Boards 99

Chapter 7 High Dimensional Designs and Process Optimization 103
7.1 Fractional Factorial Design 103
7.2 Response Surface Methodology 110
7.3 Process Optimization 114
7.3.1 Sequential Simplex Design 114
7.3.2 The Method of Steepest Ascent 116
7.3.3 Experiments with Mixtures 116

Chapter 8 The Correspondence Between Objectives, Design, and Analysis — Revisited 119
8.1 Data Analyses vs. Study Objectives and Design 119
8.2 Types of Data 120
8.3 Verification of Assumptions 121

8.4 Multiplicity Adjustments 123
8.5 Statistical Packages 124
8.6 Analysis Strategies 126
8.6.1 Parametric Methods for Continuous Data 127
8.6.2 Nonparametric Methods for Continuous Data 130
8.6.3 Methods for Discrete and Categorical Data 133
8.7 Meta Analyses 135

Chapter 9 Summary and Concluding Remarks 137
9.1 The Role of the Statistician 137
9.2 Summary 139
9.3 Concluding Remarks 140

References 143

Appendix A. Glossary of Statistical Terms 147

Appendix B. Formulas for Sample Size Estimation 151
B.1 Sample Size Formulas for Point Estimation 151
B.2 Sample Size Formulas for Interval Estimation 152
B.3 Sample Size Formulas for Hypothesis Testing 153

Index 157

Biology

Without relying on the detailed and complex mathematical explanations found in many other statistical texts, ***Principles of Experimental Design for the Life Sciences*** teaches how to design, conduct, and interpret top-notch life science studies. Learn about planning biomedical studies, the principles of statistical design, sample size estimation, common designs in biological experiments, sequential clinical trials, high dimensional designs and process optimization, and the correspondence between objectives, design, and analysis. Each of these important topics is presented in an understandable and non-technical manner, free of statistical jargon and formulas. The book also includes real-life examples from the author's 25-year biostatistical consulting career. With ***Principles of Experimental Design for the Life Sciences*** you can improve your understanding of statistics, enhance your confidence in your results, and, at long last, shake off those statistical shackles!

Features

- Presents clear and comprehensive explanations of the advantages and disadvantages of common experimental designs
- Fully describes the experimental planning process, including generation of study objectives and writing of the experimental protocol
- Clearly explains the concepts of bias and variability, as well as methods to identify and control their sources
- Presents information on methods of data analysis, highlighting the author's unique "one-to-one-to-one" correspondence approach
- Includes two useful appendices: one on statistical terms and one on formulas for sample size estimation

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